



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/508,133	06/08/2000	MICHAEL COLE	602-1474	6758

7590

02/25/2003

LEE MANN SMITH MCWILLIAMS  
SWEENEY & OHLSON  
PO BOX 2786  
CHICAGO, IL 60690-2786

EXAMINER

FAYYAZ, NASHMIYA SAQIB

ART UNIT

PAPER NUMBER

2856

DATE MAILED: 02/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/508,133

Applicant(s)

Cole et al

Examiner

Nashmiya Fayyaz

Art Unit

2856

The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Dec 24, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above, claim(s) 21 and 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 13-18, and 23-26 is/are rejected.
- 7) ☒ Claim(s) 4-12, 19, and 20 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

Art Unit: 2856

1. Claims 21-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made without traverse in Paper No. 6.

2. Claims 25-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 4-12 and 19-20 are objected to under 37 CFR 1.75© as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim.

See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

5. Claims 1-3, 13-18 and 23-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, on lines 11 et seq, it is unclear what a "weight value" is referring to. It should probably be specified what "weight" is being computed. In claim 3, how does the "computing means" rotate with the rotor? In claim 13, on lines 3-4, it appears that the "sample" is being improperly recited as "connected to the rotor". On line 6, "it" is unclear. On line 7, "the signal" is being computed. In claim 14, on line 4, "a" should probably be --the-- . In claims 13 and 15-16 the "first mentioned transducer" should probably be referred to as a --force transducer means--.

Art Unit: 2856

In claim 18, what is the “resilient means” and in claim 17, “the force transducer -- lacks antecedent basis. On line 4, “it” is unclear. Also, on line 4, “the instantaneous centrifugal force” lacks antecedent basis. In claim 23, it is unclear on line 4 whether the “force signal” is related to the “transducer” of line 3. On line 7, “the computed weight value” lacks antecedent basis.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3, 13-18 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Solberg, Jr. et al - U.S. Patent # 5,900,590.

As to claims 1-3, 13-18, 23 and 24, Solberg et al disclose a method of measuring masses of objects or non-solids held in container 21a rotating on arm 21 by motor 14 including mounting a force sensor 15 on the arm 21 to measure the centrifugal force  $F$  and a position sensor 23 to determine rotational velocity and supplying the measurements to controller 16 which controls operation and includes a memory and programmable processor which uses the angular velocity, force and tare mass to calculate the mass of the object 11, see specifically Fig. 2 and col. 3, lines 30 et seq. Further, Solberg et al fail to disclose evaporation with a chamber with a vacuum. However, as per applicant's own disclosure and preamble, centrifugal evaporators which have vacuum chambers are “well-known” and available commercially, see page 1 of disclosure.

Art Unit: 2856

Therefore, application of the process disclosed by Solberg et al for measuring mass while centrifuging using a force transducer which is disclosed as for liquids or semi-solids would have been obvious to one of ordinary skill in the art at the time of the invention to apply to liquids or semi-solids being centrifuged in a vacuum chamber of an evaporative centrifuge since such centrifuges are old and well-known as disclosed by Applicant. As to claims 2, 14, 17 and 24, note position sensor 23. As to claim 16, inclusion of a strain gauge would have been an obvious alternative to the disclosed load cell as a matter of design choice.


8. The abstract of the disclosure is objected to because legal phraseology such as “means” is not permitted. Correction is required. See MPEP § 608.01(b).

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional prior art cited on PTO-892 include Genser which discloses a rotary evaporator with control via pressure force sensors or Gerteris which discloses weight measurement in centrifuges .

10. Any inquiry concerning this communication should be directed to N. Fayyaz at telephone number 305-4891.



Fayyaz/ek



**DANIEL S. LARKIN**  
**PRIMARY EXAMINER**

02/11/03